Answers - Measuring length, mass and capacity

Year: Year 2

Answer to Question 1

a. Line the start of the strip up with 0 and read where it ends. The first strip ends at the 5 mark, so it is **5 cm** long.
b. The second strip also starts at 0 and ends at the 9 mark, so it is **9 cm** long.
c. Find the difference: 9 − 5 = **4 cm**. Check by counting on from 5: 6, 7, 8, 9 is 4 steps.

Answer to Question 2

a. 2 × 100 = **200 cm**.
b. 300 ÷ 100 = **3 m**.
c. 5 × 100 = **500 cm**.
d. 400 ÷ 100 = **4 m**.
e. 100 + 50 = **150 cm**.

Answer to Question 3

a. 2 × 1000 = **2000 g**.
b. 3000 ÷ 1000 = **3 kg**.
c. 500 + 500 = 1000 g = **1 kg**.
d. 1000 − 400 = **600 g**.
e. 5 × 1000 = **5000 g**.

Answer to Question 4

a. Each litre is 1000 ml, so 3 litres is 1000 + 1000 + 1000 = **3000 ml**.
b. Count how many lots of 1000 ml fit in 4000 ml: 1000, 2000, 3000, 4000. That is **4 litres**.
c. Add the two jugs: 250 ml + 250 ml = **500 ml**, which is half a litre.
d. 1 litre is 1000 ml. Take away the 600 ml poured out: 1000 − 600 = **400 ml** left in the bottle.

Answer to Question 5

a. **cm**: a pencil is about 15 cm.
b. **m**: a house is about 8 m tall.
c. **g**: a pencil is about 5 g.
d. **kg**: a dog is about 10 kg.
e. **ml**: a teaspoon holds about 5 ml.
f. **l**: a swimming pool holds thousands of litres.

Answer to Question 6

a. 35 is less than 53, so **35 cm < 53 cm**.
b. 2 kg = 2000 g, so **2 kg = 2000 g**.
c. 1 l = 1000 ml, and 500 is less than 1000: **500 ml < 1 l**.
d. 1 kg = 1000 g, and 90 is less than 1000: **90 g < 1 kg**.
e. 1 m = 100 cm, and 150 is more than 100: **150 cm > 1 m**.

Answer to Question 7

a. 3 × 100 = **300 cm**.
b. 300 − 120 = **180 cm**.
c. 2 m = 200 cm. 200 − 185 = **15 cm** short.
d. 185 cm is greater than 120 cm, so **yes**, Mia is right.

Answer to Question 8

a. 10 + 4 = **14 kg**.
b. 10 − 3 = **7 kg**.
c. 4 − 2 = **2 kg**.
d. 3 + 2 = 5 kg. 5 × 1000 = **5000 g**.

Answer to Question 9

a. 250 + 200 + 150 = 450 + 150 = **600 g**.
b. 300 + 100 = **400 ml**.
c. 1000 − 250 = **750 g**.
d. 1000 − 300 = **700 ml**.

Answer to Question 10

a. The longest jump is 160 cm, so **Carl** wins.
b. The shortest jump is 128 cm, so **Dina** comes last.
c. 160 − 128 = **32 cm** further.

d. 128 cm, 132 cm, 145 cm, 160 cm.

Answer to Question 11

a. Each bucket holds 5 litres. Count in 5s for 8 buckets: 5, 10, 15, 20, 25, 30, 35, 40. So 8 × 5 = **40 litres**.
b. Add the warm water from the jug: 40 + 2 = **42 litres**.
c. 3 litres splash out, so subtract: 42 − 3 = **39 litres** left in the pool.
d. The pool holds 50 litres. Count on from 39 to 50: 1 to reach 40, then 10 more. 1 + 10 = **11 litres** are needed.

Answer to Question 12

a. The temperature goes up by 9 degrees from 4 °C: 4 + 9 = **13 °C** at lunchtime.
b. At home time it is 5 degrees lower than 13 °C: 13 − 5 = **8 °C**.
c. Tuesday was 6 °C and Monday was 4 °C at nine o'clock. 6 is higher than 4, so Tuesday was **warmer**, by 6 − 4 = **2 degrees**.
d. Water turns into ice at **0 °C**. Below 0 °C puddles can freeze.

Answer to Question 13

a. 2 m = **200 cm**.
b. 85 + 70 = **155 cm**.
c. 200 − 155 = **45 cm**.
d. The fact books are 60 cm and only 45 cm is left. 60 is greater than 45, so they will **not fit**. They are 15 cm too long.

Answer to Question 14

a. 2 × 1000 = **2000 ml**.
b. 6 × 250 = **1500 ml**.
c. 2000 − 1500 = **500 ml** left.
d. 500 ÷ 250 = **2 cups**, because 2 × 250 = 500.

Answer to Question 15

a. 6 × 500 = 3000 ml, which is **3 litres**.
b. 3 × 2 = **6 kg**.
c. 4 × 150 = **600 cm**, which is **6 m**.
d. 30 × 100 = 3000 ml. The children drink 3000 ml and there is 3000 ml. **Yes**, there is just enough.

e. 3000 − 3000 = **0 ml** left. None is left and none more is needed.

Answer to Question 16

a. 4 × 90 = **360 cm**.
b. 3 × 100 = **300 cm**.
c. 3 × 90 = 270 cm, and 4 × 90 = 360 cm is too long. He can cut **3 shelves** and 300 − 270 = **30 cm** is left over. The 4th shelf needs a second plank.
d. 2 × 160 = **320 cm**.
e. Shelves 360 cm + sides 320 cm = 680 cm. Two planks are 600 cm, and 680 is greater than 600, so Grandad is **not right**. He needs 80 cm more.

Answer to Question 17

a. 2 + 1 = **3 kg**.
b. 3000 ÷ 500 = **6 small bags**.
c. 3 × 1000 = **3000 g**.
d. 2 × 500 = 1000 g, which is **1 kg**.
e. 3 − 1 = **2 kg** are left.

Answer to Question 18

a. 80 + 45 + 15 = **140 litres**.
b. 80 ÷ 10 = **8 buckets**.
c. 31 − 18 = **13 degrees**.
d. Elephants and monkeys together: 80 + 15 = 95 litres. 45 is less than 95, so he is **not right**.

Answer to Question 19

a. 31 − 12 = **19 cm**.
b. Week 1 to 2: 19 cm. Week 2 to 3: 58 − 31 = 27 cm. Week 3 to 4: 90 − 58 = 32 cm. The most growth is **between week 3 and week 4** (32 cm).
c. 100 − 90 = **10 cm**.
d. Each week the plant grows more than 10 cm, so by week 5 it will be taller than 1 m. **Yes**, she is likely to be right.

Answer to Question 20

a. 2 kg = 2000 g. 2000 ÷ 4 = **500 g** for each book.
b. 4 × 200 = 800 ml. 1000 − 800 = **200 ml** left.

c. 5 m = 500 cm. 500 is more than 450, so Zara is **right**.
d. Write all in cm: 100, 90, 105, 95. In order: **90 cm, 95 cm, 1 m, 1 m 5 cm**.