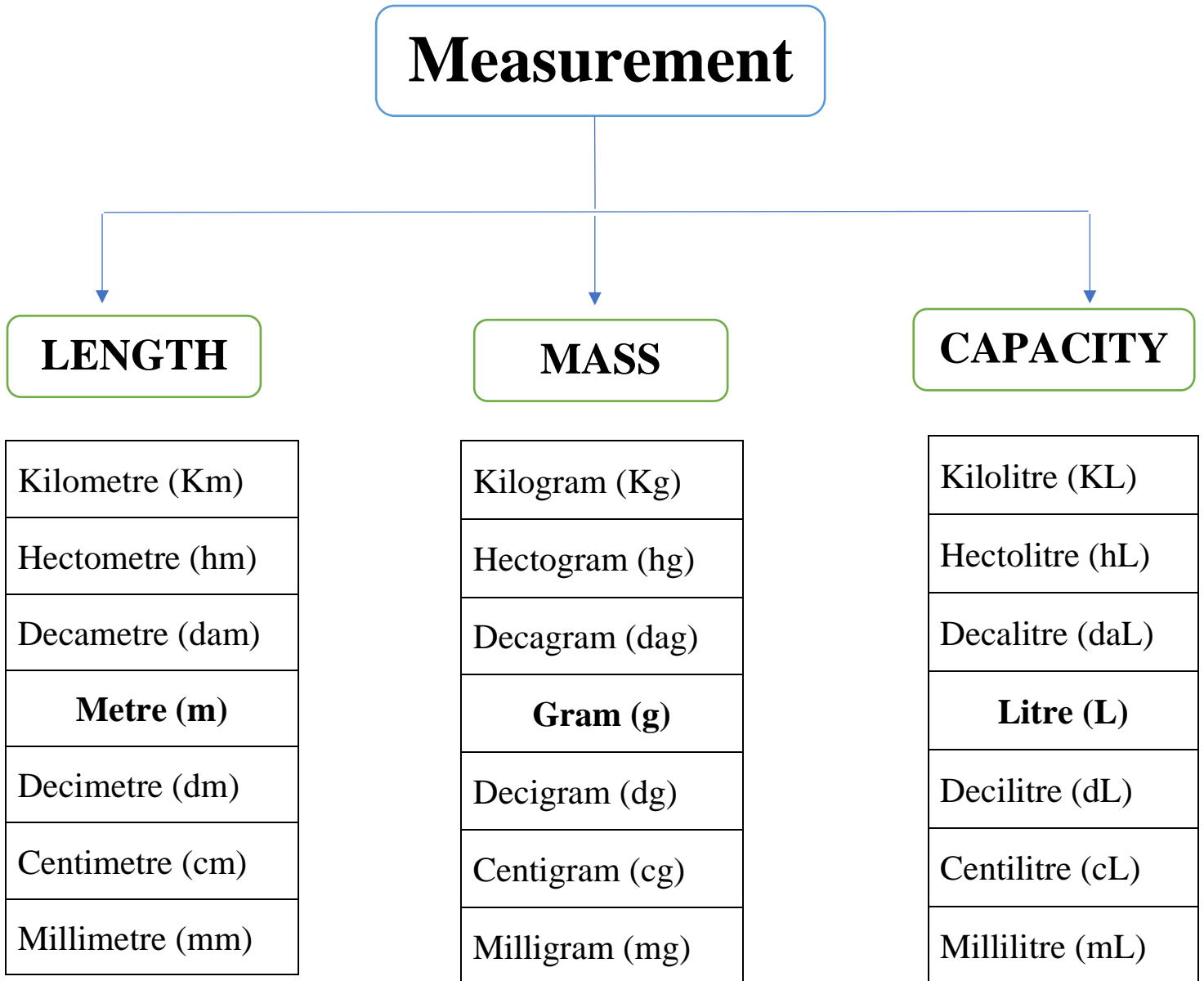


Ch-11 Measurement

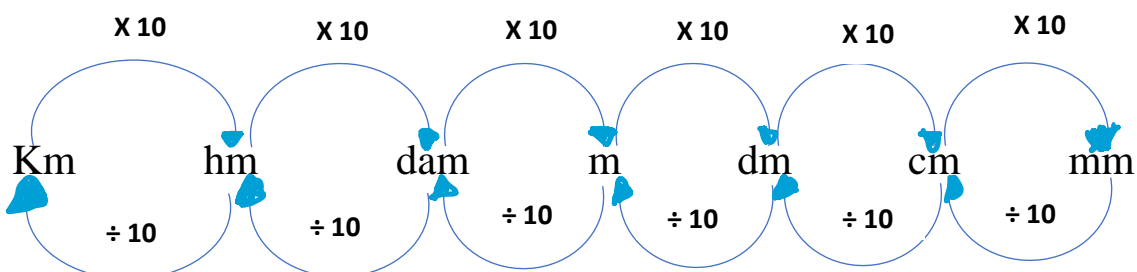
Points to remember

- 1) The set of standard units of measurement that we use is known as metric system.
- 2) There are 3 types of Measurement;



Length

- (a) The standard unit of length is **metre (m)**.
- (b) To change from higher unit to lower unit, we multiply each step by 10.



(c) To change from lower to higher units , we divide each step by 10.

(d) Kilometre , Hectometre and Decametre are higher units.

(e) Decimetre , centimetre and millimetre are lower units.

$$1 \text{ km} = 1000 \text{ m}$$

$$1 \text{ hm} = 100 \text{ m}$$

$$1 \text{ dam} = 10 \text{ m}$$

$$1 \text{ dm} = \frac{1}{10} \text{ m} = 0.1 \text{ m}$$

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

$$1 \text{ mm} = \frac{1}{1000} \text{ m} = 0.001 \text{ m}$$

Quick Assessment



Page No- 138

Fill in the blanks.

1. $4.5 \text{ m} = 4.5 \times 100 \text{ cm} = 450 \text{ cm}$ 2. $10 \text{ m} = \text{ } \text{ mm} = \text{ } \text{ mm}$
3. $18.4 \text{ km} = \text{ } \text{ m} = \text{ } \text{ m}$ 4. $3 \text{ km} = \text{ } \text{ m} = \text{ } \text{ m}$
5. $4.26 \text{ hm} = \text{ } \text{ m} = \text{ } \text{ m}$ 6. $36.8 \text{ dam} = \text{ } \text{ m} = \text{ } \text{ m}$
7. $42 \text{ m} = \text{ } \text{ cm} = \text{ } \text{ cm}$ 8. $7000 \text{ mm} = \text{ } \text{ m} = \text{ } \text{ m}$
9. $250 \text{ cm} = 250 \div 100 \text{ m} = 2.5 \text{ m}$ 10. $7000 \text{ m} = \text{ } \text{ km} = \text{ } \text{ km}$
11. $30 \text{ m} = \text{ } \text{ dam} = \text{ } \text{ dam}$ 12. $6750 \text{ m} = \text{ } \text{ km} = \text{ } \text{ km}$
13. $2300 \text{ m} = \text{ } \text{ hm} = \text{ } \text{ hm}$ 14. $2 \text{ dm} = \text{ } \text{ m} = \text{ } \text{ m}$

Solution :-

Handwritten solutions for the quick assessment questions:

1. $4.5 \text{ m} = \text{ } \text{ cm}$
 $1 \text{ m} = 100 \text{ cm}$
 $4.5 \text{ m} = 4.5 \times 100 \text{ cm}$
 $= 450.0 \text{ cm}$
 $= \underline{450 \text{ cm}}$

2. $10 \text{ m} = \text{ } \text{ mm}$
 $1 \text{ m} = 1000 \text{ mm}$
 $10 \text{ m} = 10 \times 1000 \text{ mm}$
 $= \underline{10000 \text{ mm}}$

3. $18.4 \text{ km} = \text{ } \text{ m}$
 $1 \text{ km} = 1000 \text{ m}$
 $18.4 \text{ km} = 18.4 \times 1000 \text{ m}$
 $= 18400.0 \text{ m}$
 $= \underline{18400 \text{ m}}$

4. $4.26 \text{ hm} = \text{ } \text{ m}$
 $1 \text{ hm} = 100 \text{ m}$
 $4.26 \text{ hm} = 4.26 \times 100 \text{ m}$
 $= 426.00 \text{ m}$
 $= \underline{426 \text{ m}}$

6. > 36.8 dam = _____ m

8. > 7000 mm = _____ m

1 dam = 10 m

1 mm = $\frac{1}{1000}$ m

$$\begin{aligned}
 36.8 \text{ dam} &= 36.8 \times 10 \text{ m} \\
 &= 368.0 \text{ m} \\
 &= \underline{\underline{368 \text{ m}}}
 \end{aligned}$$

$$\begin{aligned}
 7000 \text{ mm} &= \frac{7000}{1000} \text{ m} \\
 &= \underline{\underline{7 \text{ m}}}
 \end{aligned}$$

9. > 250 cm = _____ m

10. > 7000 m = _____ km

1 cm = $\frac{1}{100}$ m

1 m = $\frac{1}{1000}$ km

$$\begin{aligned}
 250 \text{ cm} &= \frac{250}{100} \text{ m} \\
 &= \underline{\underline{2.50 \text{ m}}}
 \end{aligned}$$

$$\begin{aligned}
 7000 \text{ m} &= \frac{7000}{1000} \text{ km} \\
 &= \underline{\underline{7 \text{ km}}}
 \end{aligned}$$

11. > 30 m = _____ dam

13. > 2300 m = _____ hm

1 m = $\frac{1}{10}$ dam

1 m = $\frac{1}{100}$ hm

$$\begin{aligned}
 30 \text{ m} &= \frac{30}{10} \text{ dam} \\
 &= \underline{\underline{3.0 \text{ dam}}}
 \end{aligned}$$

$$\begin{aligned}
 2300 \text{ m} &= \frac{2300}{100} \text{ hm} \\
 &= \underline{\underline{23.00 \text{ hm}}}
 \end{aligned}$$

In Quick assessment Q4, Q7, Q12 and Q14 are homework