

Prepared by Ariful Haque

Lecture Sheet-2 (17.06.2020)

Class 4 Math

Chapter 10: Measurement

Weight:

Weight is the amount of heaviness of an object.

There are many units of measuring weights. They are kilogram (kg), gram (g) etc. We can convert them into the following way:

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

$$1 \text{ g} = 0.001 \text{ kg}$$

Converting units:

#Express 7 kg 845 g in 'kg' and 'g'.

We know, $1 \text{ g} = 0.001 \text{ kg}$

$$\begin{aligned} 845 \text{ g} &= 845 \times 0.001 \text{ kg} \\ &= 0.845 \text{ kg} \end{aligned}$$

$$\begin{aligned} \text{So } 7 \text{ kg } 845 \text{ g} &= 7 \text{ kg} + 0.845 \text{ kg} \\ &= 7.845 \text{ kg (answer)} \end{aligned}$$

Again, we know, $1 \text{ kg} = 1000 \text{ g}$

$$\begin{aligned} 7 \text{ kg} &= 7 \times 1000 \text{ g} \\ &= 7000 \text{ g} \end{aligned}$$

$$\begin{aligned} \text{So } 7 \text{ kg } 845 \text{ g} &= 7000 \text{ g} + 845 \text{ g} \\ &= 7845 \text{ g (answer)} \end{aligned}$$

Volume:

Volume is the amount of space contained within an object.

Units of volume of liquid are liter (l), deciliter (dl), milliliter (ml). We can convert them into the following way:

$$1 \text{ L} = 10 \text{ dl} = 1000 \text{ ml}$$

$$1 \text{ dl} = 100 \text{ ml}$$

$$1 \text{ dl} = 0.1 \text{ L}$$

$$1 \text{ ml} = 0.01 \text{ dl}$$

$$1 \text{ ml} = 0.001 \text{ L}$$

Another unit of volume of liquid is 'cc'(cubic centimeter). It is related to 'ml'.

$$1 \text{ cc} = 1 \text{ ml}$$

Calculating Volume:

#Rupa made 2 liters of orange juice and drank 550 ml of it. How much juice remains? Express in 'L' and 'ml'.

We know, $1 \text{ L} = 1000 \text{ ml}$

$$\begin{aligned} 2 \text{ L} &= 2 \times 1000 \text{ ml} \\ &= 2000 \text{ ml} \end{aligned}$$

So juice remains = $2000 - 550 \text{ ml}$

$$= 1450 \text{ ml (answer)}$$

Again, we know, $1 \text{ ml} = 0.001 \text{ L}$

$$\begin{aligned} 1450 \text{ ml} &= 1450 \times 0.001 \text{ L} \\ &= 1.450 \text{ L (answer)} \end{aligned}$$