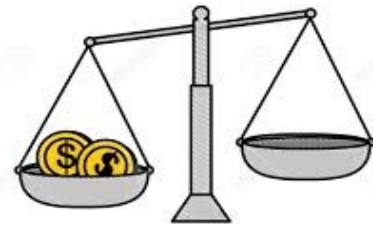


**Weight:** Weight is how heavy something or how much mass it has. An example of weight is when a person is 60 kg.



**Formula:**

1) 1 kilogram (kg) = 1000 gram (g)

$$1 \text{ gram (g)} = \frac{1}{1000} = 0.001 \text{ kilogram (kg)}$$

2) 1 hectogram (hg) = 100 gram (g)

$$1 \text{ gram (g)} = \frac{1}{100} = 0.01 \text{ hectogram (hg)}$$

3) 1 decagram (dag) = 10 gram (g)

$$1 \text{ gram (g)} = \frac{1}{10} = 0.1 \text{ decagram (dag)}$$

4) 1 Quintal = 100 kilogram (kg)

$$1 \text{ kilogram (kg)} = \frac{1}{100} = 0.01 \text{ Quintal}$$

5) 1 metric ton = 10 quintal

6) 1 metric ton = 1000 kilogram (kg)

**Word problem:**

**1) How many students of 30-kg are necessary to make a weight equal to a car of 1.5 metric tons?**

**Solution:**

Here, 1.5 metric ton =  $(1.5 \times 1000)$  kg [ $\because$  1 metric ton = 1000kg]

$$= 1500 \text{ kg}$$

30 kg = weight of 1 student

$\therefore$  1500kg = weight of  $(1500 \div 30)$  students

$$= 50 \text{ students}$$

Ans: 50 students.

### Exercise (Do yourself)

- a) Latif went to a market, and bought 3.5kg of rice, 8hg of vegetables and 2400g of meat. How many kilograms of items did he buy?
- b) A book weighs 124g. How many kilograms will be if there are 80 books?
- c) There are 8 people and their total weight is 451.2kg. What is the average weight in hectogram of these 8 people?