Measurement of Weight

Units of mass		
Milli (m)	Milligram (mm)	$\frac{1}{1000}$ of a gram
Centi (c)	Centigram (cg)	$\frac{1}{100}$ of a gram
Deci (d)	Decigram (dg)	$\frac{1}{10}$ of a gram
Basic unit		Gram (g)
Deca (da)	Decagram (dag)	10 grams
Hecto (h)	Hectogram (hg)	100 grams
Kilo (k)	kilogram (kg)	1000 grams

Let us understand with some examples:

Example 1: Convert 4 g 3 dg 2 cg into mg

Solution: 1 g = 1000 mg (3 jumps of 10 each make it 1000)

1 dg = 100 mg (2 jumps of 10 each make it 100)

1 cg = 10 mg (1 jump of 10 makes it 10)

So, 4 g = 4 × 1000 mg = 4000 mg

3 dg = 3 × 100 mg = 300 mg

2 cg = 2 × 10 mg = 20 mg

On adding them all, you get:

4 g 3 dg 2 cg = 4000 + 300 + 20 = **4320 mg**

Measurement of Weight

Example 2: 45 cg 312 mg into g

Solution: 100 cg = 1 g; 1,000 mg = 1 g

45 cg = 45/100 g; 312 mg = 312/1000 g

45 cg 312 mg = 0.45 g + 0.312 g = 0.450 + 0.312 = 0.762 g

Thus, 45 cg 312 mg = **0.762 g**