



Lesson 12

Which is Heavier?

Rinku and Tinku went to the market. They purchased 1kilogram pulses, 5kilogram rice, 500gram sugar, 200gram tea leaves and 200gram spices. Rinku and Tinku were watching the weights carefully during measurement. The shopkeeper sometimes put the same weight and sometimes used different weights to measure.



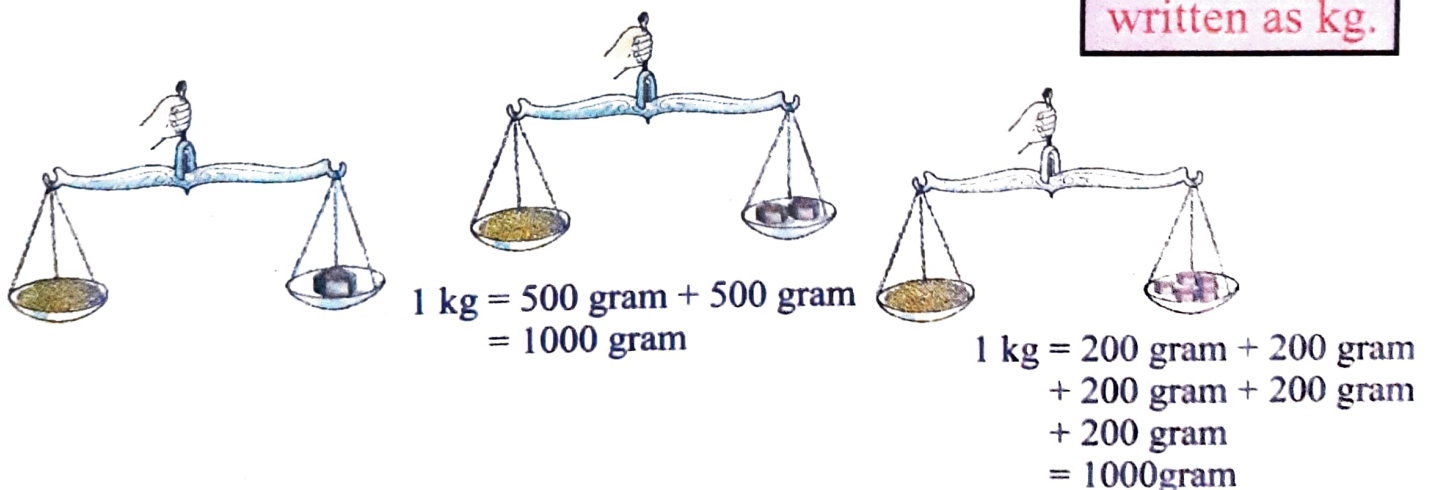
Can you tell-

- Which weight would be used to measure 5kilogram rice?
- Which weight would be used to measure 1kilogram pulse?
- Which weight would be used to measure 500gram sugar?
- Which weights would be used to measure 250gram tea leaves?
- Which weight would be used to measure 200gram spices?

What are the different ways to measure 1kilogram pulses?

See and understand-

Kilogram is written as kg.



Now tell-

- How many weights of 100 gram will be required to measure 1kilogram?
- How many weights of 50 gram will be required to measure 1kilogram?

How many grams are there in a kilogram?

$$1\text{ kg} = 500\text{g} + 500\text{g} = 1000\text{g}$$

$$2\text{ kg} = 1000\text{g} + 1000\text{g} = 2 \times 1000 = 2000\text{g}$$

Let us find out how many grams will be there if we convert 3 kg 368g into grams?

$$3\text{ kg} = 3 \times 1000\text{g} = 3000\text{g}$$

$$3\text{ kg } 368\text{g} = 3000\text{g} + 368\text{g} = 3368\text{g}$$

Let us see-

$$\begin{array}{rcl} & 1000\text{g} & = 1\text{ kg} \\ \text{Therefore, } & 2000\text{g} & = 1000\text{g} + 1000\text{g} \\ & & = 1\text{ kg} + 1\text{ kg} = 2\text{ kg} \end{array}$$

Now let us convert 8394g into kilograms and grams-

$$\begin{array}{rcl} 8394\text{g} & = & 8000\text{g} + 394\text{g} \\ 8\text{ kg} + 394\text{g} & = & \dots\dots\dots\text{g} \end{array}$$

Now add-

Bhola and Karan felt hungry, Bhola purchased 2kg 250g guavas and Karan purchased 1kg 500g grapes. How much fruits did they both purchase in all?

Let us see-

First add grams

$$250\text{g} + 500\text{g} = 750\text{g}$$

Then add kilograms

$$2\text{ kg} + 1\text{ kg} = 3\text{ kg}$$

$$\text{Total weight} = 3\text{ kg } 750\text{g}$$

It can be added this way also

kg	g
2	250
+ 1	500
3	750

If Karan purchases 750g grapes and Bhola purchases 1kg 150g guavas, what will be the total weight of the fruits purchased?

Now subtract-

Yusuf purchased 3kg 750g sugar from the grocery shop. Some sugar spilled out on the way. The sugar left in the bag was 3kg 500g. Find out how much sugar was spilled out?



Let us first subtract grams from grams

750g - 500g = 250g

Then subtract 3kg from 3kg

3kg - 3kg = 0kg

In this way the total sugar spilled = 250g

It can be subtracted this way also-

kg	g
3	750
- 3	500
0	250

Yusuf had 8kg 800g sugar. If 800g sugar spills out from his bag, how much will be left in his bag?.....

We have Learnt

- To convert kilograms into grams, multiply the number of kilograms by 1000.
- To convert grams to kilograms, divide grams by 1000.
- In the number which represents the weight in grams, the digit which comes at the place of thousands is kg, and digits at the places of hundreds, tens and ones are grams.

Make it clear that addition and subtraction of kilograms and grams are done like simple addition and subtraction.



Exercise

1. Solve –

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 5 \quad 200 \\ + 4 \quad 100 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 8 \quad 350 \\ + 9 \quad 200 \\ \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 6 \quad 550 \\ - 3 \quad 200 \\ \hline \end{array}$$

2. Add-

(a) $3\text{kg } 450\text{g} + 4\text{kg } 450\text{g}$

(b) $4\text{kg } 200\text{g} + 6\text{kg } 800\text{g}$

(c) $2\text{kg } 750\text{g} + 5\text{kg } 500\text{g}$

3. Subtract-

(a) $5\text{kg } 500\text{g} - 3\text{kg } 100\text{g}$

(b) $2\text{kg } 650\text{g} - 1\text{kg } 200\text{g}$

(c) $2\text{kg } 100\text{g} - 900\text{g}$

4. Add 3500 g and 4500 g and convert it into kg.

5. Kedar has purchased 5kg 750g wheat and 12kg 250g rice from a ration shop. How much grains did he buy?

6. Mohini's father asked her to bring 4kg 250g pulses. She brought 3kg 750g pulses by mistake. How much less weight of pulses did she bring?

7. Radha's weight is 29kg 500g and Jaspreet's weight is 33kg 200g. How much heavier is Jaspreet than Radha? Find out the total weight of Radha and Jaspreet.

8. Razia purchased 1kg cotton and Lata purchased wok (*kadahi*) of the same weight. Find out whose item would be heavier?