

Old ways of measuring



Before the mechanical/spring and digital scales, people used the **balance scales**. This type of scales has a balanced beam and two pans. You can place any object in one pan and the standard weights in the other to find the mass. When the pans contain the same mass the beam is in balance.

I have a balance scale and some kilogram weights.

I have 10 weights altogether which are:

5 g, 10 g, 20 g, 50 g, 2 × 100 g, 500 g, 1 kg and 2 × 2 kg

I can put weights on both sides of the balance

1. What is the total mass of the weights I have?
2. I can weigh 750 g of flour by using 500 g + 100 g + 100 g + 50 g weights to balance the same amount.
3. Complete this table to weigh:

Mass of flour needed	Left balance pan	Right balance pan
1 kg	1 kg of flour	1 kg (weight)
2 kg		
3 kg	3 kg of flour + 1 kg (weight)	2 kg + 2 kg (weights)
900 g		
800 g		
750 g		
600 g		
1 · 3 kg		
$1 \frac{1}{8}$ kg		